

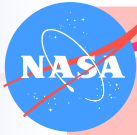
RFC 001-003 Summary

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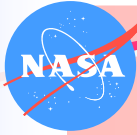
(SEEDS SPG Chair)

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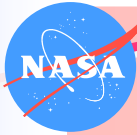
RFC 001 Charter

- Purpose : Explains the Standards Process Group goals, membership, responsibilities, and organization
- Goals of Standards Process Group
- Players
- Membership of the SPG
- Role of the SPG
- Organization of the SPG



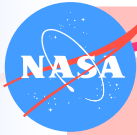
Goals of the SPG

- Enable data and service providers to easily join the ESE network of data systems through use of standards.
- Facilitate interoperability between components of the ESE network of data systems through use of standards.
- Facilitate data stewardship and preservation through use of standards.
- Develop and manage effective standards recommendation, adoption, and approval processes to guide the evolution of ESE standards.
- Support the evolving strategies and goals of the Earth Science Enterprise through use of standards.



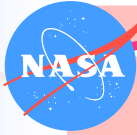
Players

- ESE Management – perform necessary financial, legal, and logistical tasks and act on SPG recommendations as appropriate
- SPG – manages the Standards Process and makes recommendations to the ESE management
- RFC Editor – responsible for the logistical coordination of RFCs and advise on content and format of RFCs



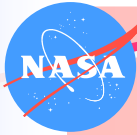
Players (continued)

- Technical Working Groups – composed of technical area experts and ESE members commissioned by SPG to perform review and evaluation of specific candidate standards.
- Process Participants, stakeholders, & public – no restriction on who can participate in the Standards Process but direct stakeholders funded by the ESE necessarily dominate the process of adopting standards for the Enterprise



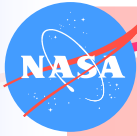
Membership of SPG

- Nominated by stakeholder organizations
- Appointed by ESE management
- Liaisons from other agencies, industry, or other ESE Working Groups (Reuse Working Group, etc.)



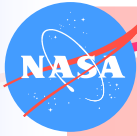
Responsibilities of the SPG

- Manage and coordinate activities in the adoption and approval of ESE Standards
- Identify interfaces or capabilities that need to be standardized across the ESE data systems
- Examine ESE requirements from NASA HQ, the different mission systems, science and application communities, and external organizations; perform a ground up analyses of different capabilities of existing ESE data systems.
- Coordinate public reviews and evaluations of various candidate standards and their implementations.



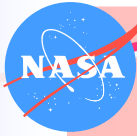
Responsibilities of SPG (continued)

- Form and task TWGs to evaluate candidate standards.
- Monitor TWGs' activities.
- Make decisions related to the disposition of standards track RFCs and technical notes in the approval process.
- Advise ESE management of resources needed to adopt and implement standards or to provide technical support for approved standards.
- Focus on adopting standards implementations that are relevant to the ESE network of data systems and that have mature implementations and operational experience.



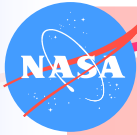
Responsibilities of SPG (continued)

- When no mature candidate standard for a defined need can be identified, advise ESE management of need for development.
- Coordinate document management for all standards track standards and technical notes that come before the SPG.
- Publicize ESE standards within ESE communities, industry, and external organizations.
- Participate in national and international data systems standards organizations.



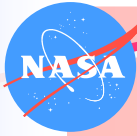
Responsibilities of SPG (continued)

- Coordinate related activities to facilitate the use of standards across ESE data systems, data providers, and data users.
- Periodically review and evaluate the process as it pertains to meeting the ESE mission and where appropriate, modify the process.
- Coordinate with other ESE working groups as identified, such as the Reuse, the Level of Services, and the Life Cycle Working Groups discussions as a liaison member.



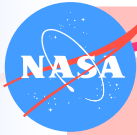
Organization of the SPG

- SPG Chair – appointed by ESE management. Manages the activities and meetings of SPG
- SPG Co-chair – elected by SPG members – Assists the SPG Chair
- SPG Engineering Team (?) – identifies capabilities and interfaces that need to be standardized across the ESE data systems. Examines ESE requirement from multiple sources : NASA HQ, science and application communities, mission systems, etc.
- SPG Decision Making – rough consensus



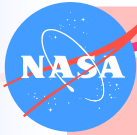
RFC 002 Standards Process

- Purpose : Explains the process of adoption of standards by the ESE Standards Process Group. It describes the process of developing the initial standards RFCs and then describes the process by which it can become an ESE standard.
- Players
- Classification of RFCS
- Path to RFC
- Standards Approval Process



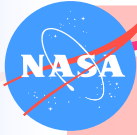
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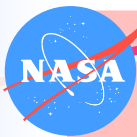
Classification of RFCs

- Technical Notes – contains technical information relevant to ESE activities but not considered to be standards
- Standards Track RFCs – proposed standards that could be promoted to ESE standards after going through the ESE Standards Process
 - Proposed Standard
 - Draft Standard
 - ESE Standard
- Core Standard – mandatory if applicable
- Community Standard – recommended by self formed communities but not required by ESE

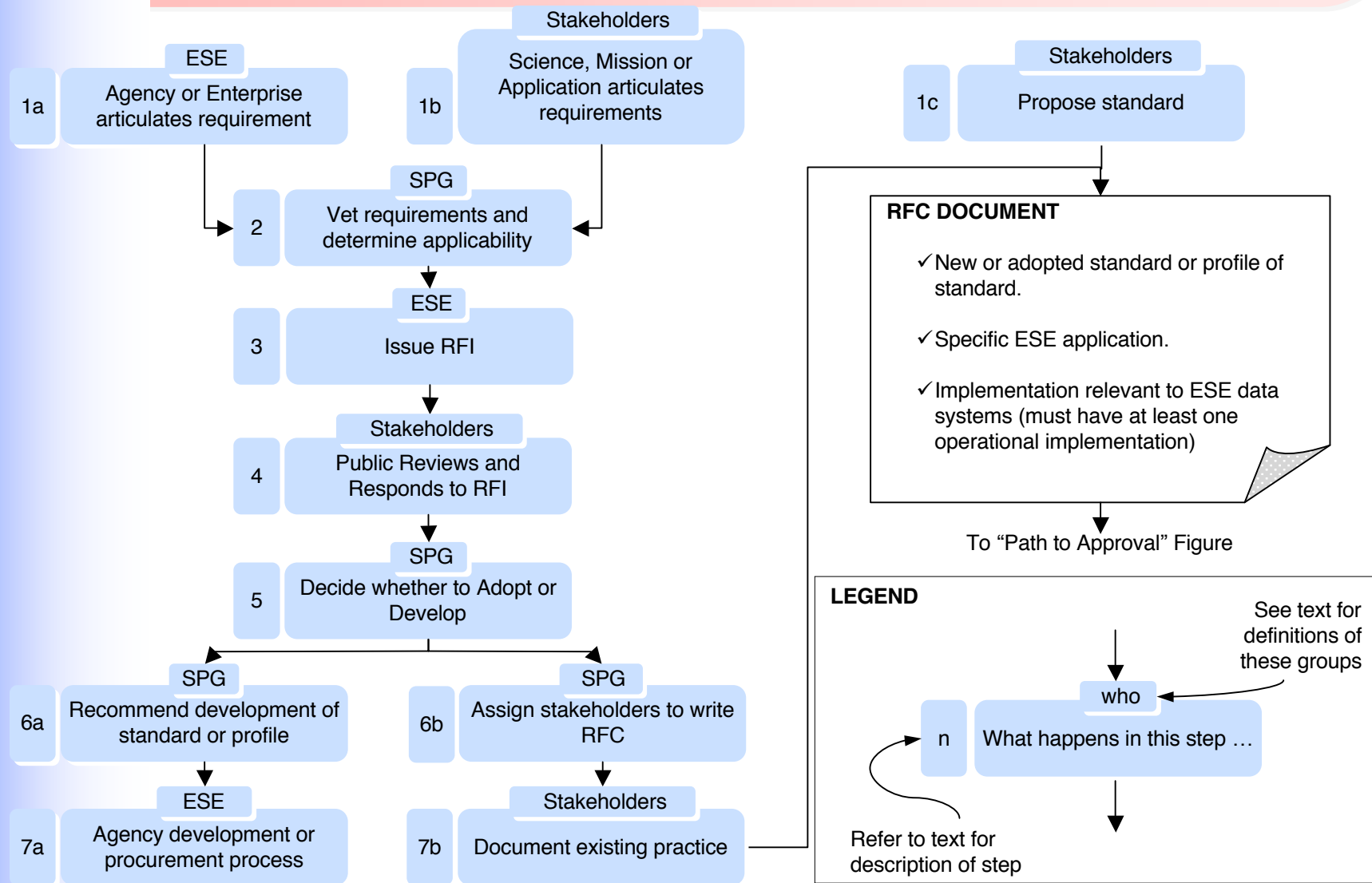


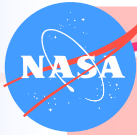
Standards Process Group Strategy

- Adopt standards at the interfaces, appropriate to given science and drawn from successful practice.
- i.e. “a strategy to adopt standards that work”.
 - Adoption, not development.
 - Demonstrated implementation feasibility.
 - Demonstrated operational benefit.
 - Endorsement by “community of practice”.
- Consequence of standard
 - Future ESE data systems component proposals will be judged partly on how well they use of appropriate ESE standards or else justify why departure from standard is necessary.



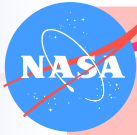
Path to RFC



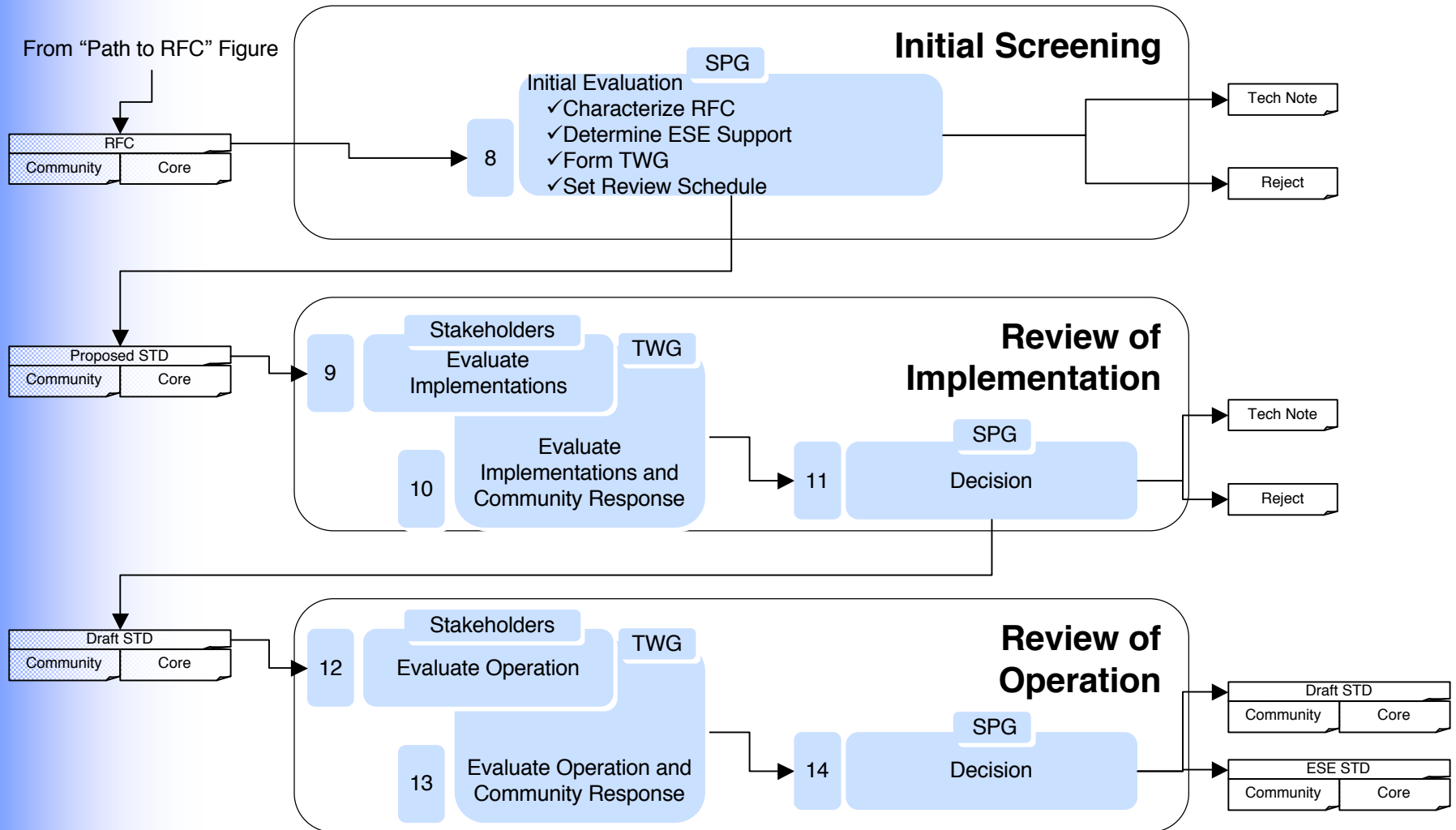


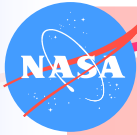
Path to RFC Directed or Organic Paths

- The ESE Standards Process manages production and promotion of standards specification documents called “Requests for Comments” (RFCs). RFCs may be “directed” in response to identified ESE requirements or may arise “organically” from the community of ESE stakeholders.
 - RFCs are directed in response to an identified need through a process of top-down analysis and solicitation via steps 1 through 7. The SPG will facilitate analysis of the requirement and solicitation of solutions. The SPG will assign a stakeholder to write and submit an RFC describing existing practice, or, if no appropriate standard exists, new development will be done via normal NASA development or procurement methods.
 - The organic path is shown as step 1c. This path short-circuits up-front analysis by the SPG. Standard RFCs flow directly from ESE data systems stakeholders who will propose working standards based on their own implementation or experience.
- By either path, an RFC will be generated that defines or



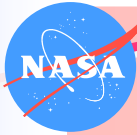
Path to Approval





Path to Approval 3-Phase Process

- RFCs are evaluated in three phases. Successful outcome at each phase results in advancement from "Submitted Standard" to "Proposed Standard" to "Draft Standard" to "ESE Standard".
 - The SPG first determines applicability to ESE science data systems goals and that materials necessary for review of the proposal and of reference implementations are available. The SPG forms a "Technical Working Group" (TWG), sets a schedule for review and releases the RFC as a "Proposed Standard". The SPG may otherwise reject the submission, or publish it as a "Technical Note."
 - Stakeholders, broadly defined, may comment on the RFC. The TWG evaluates for technical soundness. After integrating community comments the TWG reports to the SPG. The SPG may recommend the RFC be promoted to "Draft Standard". Alternately, it may reject the RFC or publish it as a technical note. ESE management concurrence is required for promotion.
 - Again, stakeholders, the TWG and SPG review the RFC - this



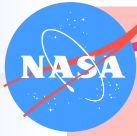
RFC 003 – Instructions to Authors

- Purpose : Contains information about the preparation of the RFCs: the optional and required sections, the packaging instructions, and submission guidelines
- RFC Editorial and Publication Policies
- RFC Required and Optional Sections
- Submission and Packaging Options



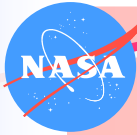
RFC Editorial and Publication Policies

- All RFCs are not standards. Some are Technical Notes
- All RFCs must be written in English
- An RFC cannot be changed once it is published. A new RFC must be written that obsoletes the old one.
- An RFC can be new, or updates or Obsoletes an old RFC
- Normative References encouraged.
- URLs are discouraged
- Authors list is required



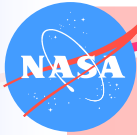
RFC Required and Optional Sections

- Required Sections :
 - Running Page Headers
 - Title
 - Status of Memo (type of RFC and distribution stmt)
 - Copyright Notice
 - Abstract
 - Body of Memo
 - Authors Section
- Optional Sections:
 - Change Explanation if the RFC updates or obsoletes a previous RFC
 - Table of Contents



RFC Submission and Packaging Options

- Release Format is Adobe Portable Document Format. ESE RFCs will also be available in their submitted format (Microsoft Word or HTML files)
- Overuse of Styles in Microsoft Word or HTML discouraged since all documents converted to PDF later
- Templates containing a minimal set of styles will be provided on the SPG website
- Submission can be in single file or multiple files. Multiple files must be bundled using a mechanism such as tar format
- Supporting Materials may be a wide variety (database schemas, XML schemas, source code, etc) – and can be submitted in multiple files
- Submission mechanism – RFC author should contact the RFC Editor to submit an RFC to the Standards



Contacts

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